SILVER BROMOIODIDE CORE-SHELL GRAIN EMULSION

CLAIMS

- 1. A light-sensitive emulsion comprising silver bromoiodide grains of a core shell structure comprising: a) an inner core consisting essentially of silver bromide or silver bromoiodide and having a silver iodide content within the range of 0 to 10 mole %, and b) a plurality of shells consisting essentially of silver bromide or silver bromoiodide, wherein said silver bromoiodide grains exhibit an average grain size lower than 0.60 micrometer, an average grain thickness lower than 0.15 micrometer, and an average aspect ratio lower than 5:1.
- The light-sensitive emulsion according to claim 1, wherein said inner core consists essentially of silver bromide.
- 3. The light-sensitive emulsion according to claim 1, wherein said silver bromoiodide grains have an average iodide content ranging from 1 to 10 mol%, relative to the total halide content of the grains.
- 4. The light-sensitive emulsion according to claim 1, wherein the silver content of said inner core ranges from 10 to 50 mol% relative to the total silver content of the grains and the silver content of said plurality of shells ranges from 50 to 90 mol% relative to the total silver content of the grains.
- 5. A light-sensitive silver halide photographic material comprising a support and at least one red sensitized silver halide emulsion layer associated with cyan dye-forming color couplers, at least one green sensitized silver halide emulsion layer associated with magenta dye-forming color couplers and at least one blue sensitized silver halide emulsion layer associated with yellow dye-forming color couplers, wherein at least one of said silver halide emulsion layers comprises a core-shell emulsion comprising silver bromoiodide grains having: a) an inner core consisting essentially of silver bromide or silver bromoiodide and having a silver iodide content within the range of 0 to 10 mole %, and b) a plurality of shells consisting essentially of silver bromide or silver bromoiodide, wherein said silver

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bromoiodide grains exhibit an average grain size lower than 0.60 micrometer, an average grain thickness lower than 0.15 micrometer, and an average aspect ratio lower than 5:1.

- 6. The silver halide photographic material according to claim 5, wherein said inner core consists essentially of silver bromide.
- 7. The silver halide photographic material according to claim 5, wherein said silver bromoiodide grains have an average iodide content ranging from 1 to 10 mol%, relative to the total halide content of the grains.
- 8. The silver halide photographic material according to claim 5, wherein the silver content of said inner core ranges from 10 to 50 mol% relative to the total silver content of the grains and the silver content of said plurality of shells ranges from 50 to 90 mol% relative to the total silver content of the grains.
- 9. The silver halide photographic material according to claim 5, wherein said core-shell emulsion is present in at least one of said blue sensitized silver halide emulsion layer associated with yellow dye-forming color couplers.

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10. The silver halide photographic material according to claim 9, wherein said blue sensitized silver halide emulsion layer comprises at least two sub-layers of different sensitivities, and said core-shell emulsion is present in the layer of lowest sensitivity.